

NEW ORIBATID MITES FROM CENTRAL AMERICA  
(ACARI: CRYPTOSTIGMATA)<sup>1</sup>

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Several oribatids from Guatemala and Honduras were sent to me for identification. Observations of these mites showed them to be new, and they are described below.

LOHMANNIIDAE

The first of these mites is in the family Lohmanniidae, but does not fit any of the existing genera. Balogh (1961) makes the principal separation of the two main groups of genera on the basis of transversely divided or undivided genital covers. Thus, *Lohmannia*, *Thamnacarus*, *Cryptacarus*, *Papillacarus*, e.g., exhibit divided genital covers; in *Meristacarus*, *Mixacarus*, *Torpacarus*, *Annectacarus*, *Javacarus*, e.g., the genital plates are without this transverse suture.

This new lohmanniid seems to fit between these two generic groups because the genital covers are entire, but exhibit faint vestiges of a transverse suture. It was compared with species described by Grandjean (1950) and Balogh (1958, 1960, 1961, 1961a, 1962, 1962a).

*Euryacarus petalus*, n. gen., n. sp.

(Figs. 1, 2)

*Diagnosis:* Differs from other genera and species in the arrangement of the finely barbed hairs, the integumental pits, and its general broad and flattened appearance indicated in the names. It resembles *Mixacarus integer* Balogh, 1958, and *Javacarus kühneli* Balogh, 1961, in the pitted integument and the four pairs of anal setae, but is about a third larger than the latter, much broader than both, differs in the sculpturing of the prodorsum and lacks the transverse notogastral plate associated with the cervical hairs in *J. kühneli*.

*Description:* Prodorsum indistinctly separated from hysterosoma by a fine suture; rostrum blunt, rounded, extended over gnathosoma in such a way as to form a slight hood, a distinct marginal line extending posterolaterad of the rostrum almost to pseudostigmata; rostral hairs finely setose, inserted about half their lengths posterior to rostral tip; lamellar hairs nearly a third longer than rostral hairs, inserted near lateral edges of prodorsal margin, closer to rostral hairs than to interlamellar; surface of prodorsum pitted; lamellae and trans-lamella absent; interlamellar hairs twice as long as lamellar hairs, curved outward at tips, finely barbed, inserted mediad of pseudostigmata; pseudostigmata small, cornuate; sensillus lanceolate, with pectinate anterior margin along distal half; anterior exobothridial hair (*exa*) laterad of pseudostigmata, about same length as lamellar hair; posterior exobothridial hair (*exp*) shorter, inserted more medially; dorsosejugal suture indistinctly separating prodorsum and notogaster; hysterosoma with small, rounded pits, but slightly different in sculpturing from prodorsum (Fig. 1); twelve pairs of finely barbed, curved notogastral setae, setae *c*<sub>2</sub> missing in specimen.

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Gnathosoma with a ventral groove, chelicerae stout; ventral plate with setae, apodemata as shown in figure 2, slightly broken in type specimen; genital aperture and anal aperture contiguous, genital plates rounded laterally, each genital cover with six medial setae, four longer lateral setae; anal covers elongated, slightly displaced in holotype, ridged toward medial edge, each anal cover with four long hairs; adanal setae as shown in figure 2; some leg segments missing in type specimen; left leg I with keeled, pointed femur; tarsus monodactyle.

Length: 840  $\mu$ , propodosma 372  $\mu$ , hysterosoma 468  $\mu$ ; width: 588  $\mu$ .

This single type specimen was collected in soil with cuttings from Guatemala, at Nogales, N. M., 27 February 1958, by G. R. Dunn (Lot 58-5907). It will be deposited in the U. S. National Museum.

#### EPILOHMANNIIDAE

Two mites belonging to the genus *Epilohmannia* were among the specimens sent for identification. Both are broken, but the distinguishing features are discernible.

#### *Epilohmannia cultrata*, n. sp.

(Figs. 3, 4)

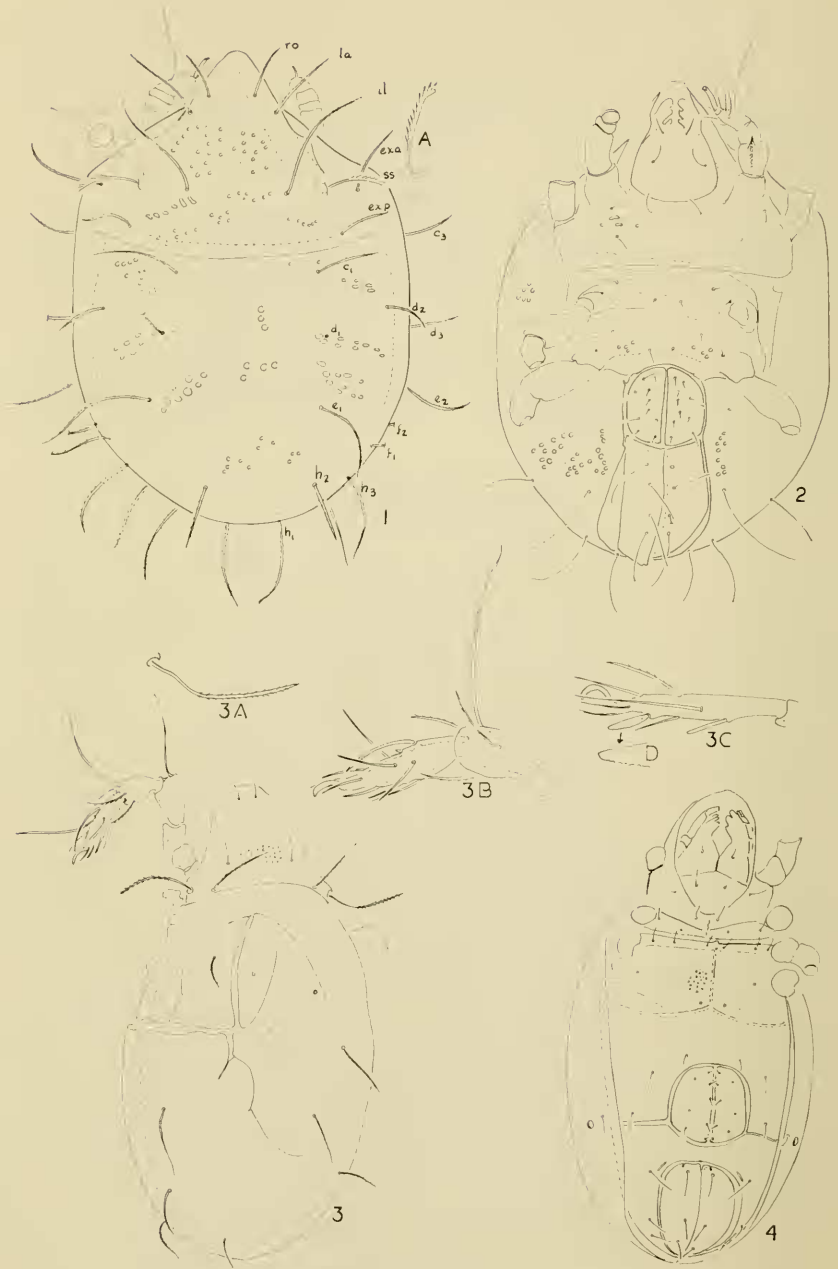
*Diagnosis:* The species is similar to *Epilohmannia verrucosa* Jacot, 1934, but with five setae on medial edge of genital covers, a longer and narrower sensillus, and lateral glandular fissure on ventrolateral margin of hysterosoma. It differs from *E. insignipes* Balogh (1962) in the pitted prodorsum, from *E. ovata* Aoki, 1961, in the smaller number of ventral hairs, and from all of these species in the knife-like hairs on tarsus IV, implied in the specific name.

*Description:* Dark reddish brown; prodorsum triangular, surface with small pits; rostrum rounded, translucent, hood-like; rostral hairs simple, setiform, curved, inserted medially on dorsum less than their lengths apart; lamellar hairs setiform, about as long as rostral hairs, curved, inserted closer to interlamellar hairs than to rostral; lamellae and translamella absent; interlamellar hairs about as long as sensillus, finely barbed, somewhat erect, inserted nearer pseudostigmata than to lamellar hairs; pseudostigmata at posterolateral corners of prodorsum; sensillus slightly setose, lanceolate; hysterosoma broken in type specimen; dorsal surface with finely barbed hairs (Fig. 3).

Infracapitulum depressed, withdrawn inside of camerostome; ventral plate, ventral setae, apodemata as seen in figure 4; genital aperture nearly round, genital plates rounded laterally, each cover with five setae near medial margin, three setae nearer lateral edge, medial setae fine, lateral setae longer and stouter; anal aperture longer than broad, separated by ventral plate from genital opening; each anal cover with three simple, relatively long setae; three pairs of adanal setae laterad of anal opening, ada : 3 about twice its length from insertion of ada : 2; anal fissure anterior to a : 1 in margin of cover; fissure *iad* at anterolateral corner of anal opening.

Legs monodactylous; famulus of tarsus I short, spine-like; solenidion  $\omega_2$  on tarsus I robust, curved; two flattened, knife-like setae on ventral surface of tarsus IV.

Length: 614  $\mu$ ; width: 314  $\mu$  (in broken specimen).



The type specimen and one other were collected in soil with cuttings from Guatemala, at Nogales, N. M., 27 February 1958, by G. R. Dunn (Lot 58-5907). The type will be deposited in the U. S. National Museum.

#### ORIBATULIDAE

A new oribatulid was among the specimens from Central America and is described below.

#### *Nasobates spinosus*, n. gen., n. sp.

(Figs. 5, 6)

*Diagnosis:* The new genus and species is readily distinguished by the funnel-shaped, rostral projection, long, robust, spinose prodorsal and notogastral setae. It resembles *Cosmobates tunicatus* Balogh, 1959, in the four pairs of genital setae, the heavy, bristled, prodorsal hairs, but differs in the clavate sensillus, the ten pairs of notogastral setae, the interrupted dorsosejugal suture and the elongated pteromorphs. The names are derived from the distinctive rostral snout and the heavy, spinose dorsal hairs.

*Description:* Color brown; prodorsum broadly triangular, surface beset with small tubercles; rostrum prominently expanded into a funnel-shaped snout; rostral hairs fine, about same length as lamellar hairs, inserted remote from tip of rostrum posterior to level of lamellar hairs; lamellae narrow, along sides of prodorsum, with short truncate cusps; lamellar hairs finely barbed, inserted in distal tips of cusps, projecting beyond rostrum; translamella absent; interlamellar hairs curved, robust, heavily bristled, three times as long as lamellar hairs, inserted near interrupted dorsosejugal suture; pseudostigmata rounded; sensillus clavate, with fine spines on surface of head; pedotecta I short, laterad of pseudostigmata.

Dorsosejugal suture interrupted medially; notogaster broad, rounded in outline, with narrowed, elongated pteromorphs; surface of integument (? cerotegument) tuberculous, surface beneath cerotegument (?) with rounded areolae, finely stippled; ten pairs of robust, curved, heavily bristled setae (Fig. 5).

Camerostome broadly triangular, its anterior cavity extended into snout-like rostral projection; ventral setae, apodemata, sculpturing of venter as seen in figure 6; genital opening rounded, each genital cover with four setae, subequally spaced from each other,  $g : 1$ ,  $g : 4$  closer to medial edge of cover than  $g : 2$ ,  $g : 3$ ; aggenital setae inserted equidistant from genital and anal openings; anal opening trapezoidal, each anal cover with two simple hairs; fissure *iad* close to anal opening, slightly posterior to level of insertion of  $a : 1$ ; three pairs of short, finely barbed adanal setae;  $ada : 3$  inserted about half way the length of anal aperture,  $ada : 2$ ,  $ada : 1$  posterior to opening.

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Figs. 1-2, *Euryacarus petalus*, n. gen., n. sp. Fig. 1, from the dorsal aspect, legs omitted, A. free-hand sketch of sensillus (broken at tip); fig. 2, from the ventral aspect, legs partially shown; fig. 3, *Epilohmannia cultrata*, n. sp., from the dorsal aspect, A. freehand sketch of sensillus, B. tibia and tarsus I, C. tarsus IV, showing knife-like setae, D. free-hand sketch of distal seta; fig. 4, *E. cultrata*, n. sp., from the ventral aspect.

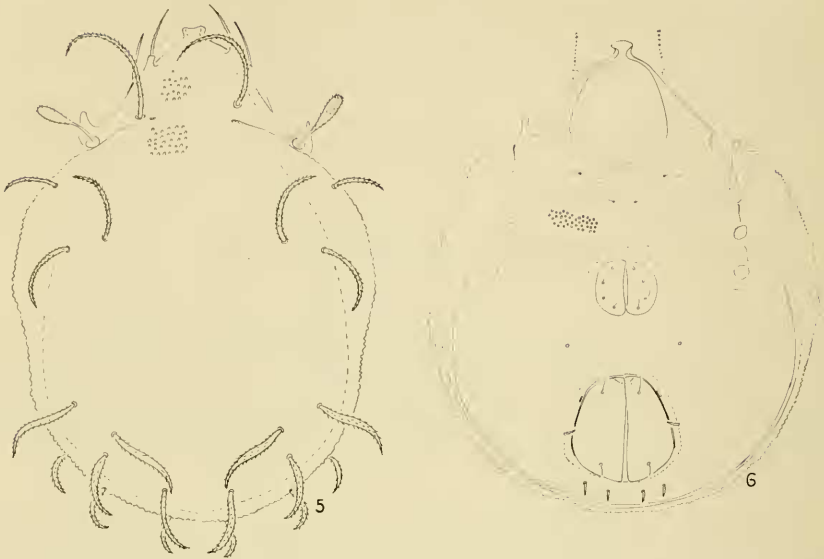


Fig. 5-6, *Nasobates spinosus*, n. gen., n. sp. Fig. 5, from the dorsal aspect; fig. 6, from the ventral aspect.

Legs heterotridactylous; several legs broken and missing in type specimen.  
Length: 432  $\mu$ , prodorsum 78  $\mu$ , hysterosoma 354  $\mu$ ; width: 360  $\mu$ .

The single type specimen, which is slightly broken, was taken with orchid plants from Honduras, at Miami, 11 March 1960, by Carl Stegmaier (Lot 60-7191). The type will be deposited in the U. S. National Museum. The measurements may be slightly in error because of the broken specimen; the drawings were reconstructed partially from the broken type specimen.

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### SOME UNUSUAL PREY RECORDS FOR POMPILIDAE

The following records pertain to Pompilidae of unknown prey preferences and to spiders rarely if at all reported as prey of these wasps. Richard Thorington, an Associate in Mammalogy at the Museum of Comparative Zoology, recently presented me with a female *Priochilus scrupulum* (Fox) taken with an immature wandering spider of the genus *Ctenus* (Ctenidae) [det. A.M. Chickering]. This specimen was taken at the Hacienda Barbasol, east of San Martin, Colombia, in March 1965. I am not aware of any previous prey records for members of this genus, or of records of the use of Ctenidae by Pompilidae.

Dr. Thorington also took, in the same locality, a female *Pepsis egregia* Mocsary and a female *P. dimidiata* Fabricius, each with a funnel-web tarantula of the genus *Diplura* (Dipluridae) [det. A.M. Chickering]. Little is known of the host relationships of the species of *Pepsis*, an extremely large genus in the neotropics.

Dr. Paul D. Hurd, Jr., of the University of California at Berkeley, recently sent me a specimen of *Pompilus* (*Perissopompilus*) *phoenix* Evans taken with a juvenile hackled-band web-spider of the genus *Filistata* (Filistatidae) [det. H. W. Levi]. The specimen was taken 7 miles NE of Desert Center, Riverside Co., Calif., on March 20, 1966. The wasp was dragging the spider backward across sparsely vegetated soil among *Larrea* bushes. This is the first prey record for this subgenus, and so far as I am aware the first record for Filistatidae for a North American pompilid.—HOWARD E. EVANS, *Museum of Comparative Zoology, Harvard University, Cambridge, Mass.*

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